

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

# MERCHANT & GOULD

## United States Patent Application

### INSTRUCTIONS

### COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

AN ANTENNA CONTROL SYSTEM

Insert TITLE of invention

Check a or b

The specification of which

a. ☒ is attached hereto

b. ☐ was filed on

If "b" checked, complete

as application serial no.

and was amended on

(if applicable)

If PCT Application

(in the case of PCT-filed application)

Insert Int. application  
number & filing date

described and claimed in international no. PCT/NZ95/00106 filed 16 October 1995

and as amended on

(if any), which I have reviewed and for which I solicit a

United States patent.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a). (Reprinted on back side).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent of inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

Prior applications  
Check a or b

a. ☐ no such applications have been filed.

b. ☒ such applications have been filed as follows:

| FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119       |                    |                                      |                                     |
|--|--------------------|--------------------------------------|-------------------------------------|
| COUNTRY  | APPLICATION NUMBER | DATE OF FILING<br>(day, month, year) | DATE OF ISSUE<br>(day, month, year) |
| New Zealand  | 264864             | 4 November<br>1994                   |                                     |
| New Zealand  | 272778             | 15 August<br>1995                    |                                     |
| ALL FOREIGN APPLICATIONS, IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S) |                    |                                      |                                     |
| COUNTRY  | APPLICATION NUMBER | DATE OF FILING<br>(day, month, year) | DATE OF ISSUE<br>(day, month, year) |
|  |                    |                                      |                                     |
|  |                    |                                      |                                     |

If "b" checked, complete

I hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

For Continuation-in-Part  
(CIP) Applications,  
complete

| U.S. APPLICATION NUMBER | DATE OF FILING<br>(day, month, year) | STATUS (patented, pending, abandoned) |
|-------------------------|--------------------------------------|---------------------------------------|
|                         |                                      |                                       |
|                         |                                      |                                       |

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

|                      |                 |                         |                   |                         |                 |
|----------------------|-----------------|-------------------------|-------------------|-------------------------|-----------------|
| Adriano, Sarah B.    | Reg. No. 34,470 | Gabilan, Mary Susan     | Reg. No. P-38,729 | Plunkett, Theodore      | Reg. No. 37,209 |
| Batzli, Brian H.     | Reg. No. 32,960 | Gates, George H.        | Reg. No. 33,500   | Pollinger, Steven J.    | Reg. No. 35,326 |
| Beard, John L.       | Reg. No. 27,612 | Golla, Charles E.       | Reg. No. 26,896   | Reich, John C.          | Reg. No. 37,703 |
| Beck, Robert C.      | Reg. No. 28,184 | Gorman, Alan G.         | Reg. No. P-38,472 | Reiland, Earl D.        | Reg. No. 25,767 |
| Bejin, Thomas E.     | Reg. No. 37,089 | Gould, John D.          | Reg. No. 18,223   | Schmidt, Cecil C.       | Reg. No. 20,566 |
| Berman, Charles      | Reg. No. 29,249 | Gresens, John J.        | Reg. No. 33,112   | Schuman, Mark D.        | Reg. No. 31,197 |
| Bogucki, Raymond A.  | Reg. No. 17,426 | Hamre, Curtis B.        | Reg. No. 29,165   | Schumann, Michael D.    | Reg. No. 30,422 |
| Bruss, Steven C.     | Reg. No. 34,130 | Hassing, Thomas A.      | Reg. No. 36,159   | Sebald, Gregory A.      | Reg. No. 33,280 |
| Byrne, Linda M.      | Reg. No. 32,404 | Hillson, Randall A.     | Reg. No. 31,838   | Smith, Jerome R.        | Reg. No. 35,684 |
| Carlson, Alan G.     | Reg. No. 25,959 | Hollingsworth, Mark A.  | Reg. No. 38,491   | Sorensen, Andrew D.     | Reg. No. 33,606 |
| Carter, Charles G.   | Reg. No. 35,093 | Kadievitch, Caroline G. | Reg. No. 38,198   | Stinebruner, Scott A.   | Reg. No. 38,323 |
| Caspers, Philip P.   | Reg. No. 33,227 | Kastelic, Joseph M.     | Reg. No. 37,160   | Strawbridge, Douglas A. | Reg. No. 28,376 |
| Clifford, John A.    | Reg. No. 30,247 | Kowalchuk, Alan W.      | Reg. No. 31,535   | Strothoff, Kristine M.  | Reg. No. 34,259 |
| Conrad, Timothy R.   | Reg. No. 30,164 | Kowalchuk, Katherine M. | Reg. No. 36,848   | Sumner, John P.         | Reg. No. 29,114 |
| Crawford, Robert     | Reg. No. 32,122 | Krull, Mark A.          | Reg. No. 34,205   | Sumners, John S.        | Reg. No. 24,216 |
| Daignault, Ronald A. | Reg. No. 25,968 | Lasky, Michael B.       | Reg. No. 29,555   | Tellekson, David K.     | Reg. No. 32,314 |
| Daley, Dennis R.     | Reg. No. 34,994 | Lynch, David W.         | Reg. No. 36,204   | Underhill, Albert L.    | Reg. No. 27,403 |
| Daulton, Julie R.    | Reg. No. 36,414 | Mau, Michael L.         | Reg. No. 30,087   | Vandenburgh, J. Derek   | Reg. No. 32,179 |
| DiPietro, Mark J.    | Reg. No. 28,707 | McDonald, Daniel W.     | Reg. No. 32,044   | Vietzke, Lance L.       | Reg. No. 36,708 |
| Edell, Robert T.     | Reg. No. 20,187 | McDonald, Wendy M.      | Reg. No. 32,427   | Welter, Paul A.         | Reg. No. 20,890 |
| Farber, Michael B.   | Reg. No. 32,612 | Mueller, Douglas P.     | Reg. No. 30,300   | Williams, Douglas J.    | Reg. No. 27,054 |
| Fauver, Cole M.      | Reg. No. 36,797 | Nelson, Albin J.        | Reg. No. 28,650   | Wood, Gregory B.        | Reg. No. 28,133 |

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Merchant & Gould to the contrary.

Please direct all correspondence in this case to Merchant, Gould, Smith, Edell, Welter & Schmidt at the address indicated below (or if no address is specified, the first address):

☐ 3100 Norwest Center, Minneapolis, MN 55402-4131  
Telephone No. (612) 332-5300

☐ 1000 Norwest Center, St. Paul, MN 55101-2701  
Telephone No. (612) 298-1055

☐ Suite 400, 11150 Santa Monica Boulevard, Los Angeles, CA 90025-3302  
Telephone No. (310) 445-1140

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Insert FULL name(s)  
AND address(es) of  
actual inventor(s)

|                           |                         |                           |                          |                           |
|---------------------------|-------------------------|---------------------------|--------------------------|---------------------------|
| 201                       | FULL NAME OF INVENTOR   | FAMILY NAME               | FIRST GIVEN NAME         | SECOND GIVEN NAME         |
|                           | RESIDENCE & CITIZENSHIP | CITY                      | STATE OR FOREIGN COUNTRY | COUNTRY OF CITIZENSHIP    |
|                           | POST OFFICE ADDRESS     | CITY                      | STATE & ZIP CODE/COUNTRY |                           |
| 202                       | FULL NAME OF INVENTOR   | FAMILY NAME               | FIRST GIVEN NAME         | SECOND GIVEN NAME         |
|                           | RESIDENCE & CITIZENSHIP | CITY                      | STATE OR FOREIGN COUNTRY | COUNTRY OF CITIZENSHIP    |
|                           | POST OFFICE ADDRESS     | CITY                      | STATE & ZIP CODE/COUNTRY |                           |
| 203                       | FULL NAME OF INVENTOR   | FAMILY NAME               | FIRST GIVEN NAME         | SECOND GIVEN NAME         |
|                           | RESIDENCE & CITIZENSHIP | CITY                      | STATE OR FOREIGN COUNTRY | COUNTRY OF CITIZENSHIP    |
|                           | POST OFFICE ADDRESS     | CITY                      | STATE & ZIP CODE/COUNTRY |                           |
| SIGNATURE OF INVENTOR 201 |                         | SIGNATURE OF INVENTOR 202 |                          | SIGNATURE OF INVENTOR 203 |
| DATE                      |                         | DATE                      |                          | DATE                      |

Each inventor must  
sign & date

Note: No legalization or  
other witness required

For Additional Inventors:

☐ Check box and attach sheet with same information, including date and signature.

**SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare:

That my residence, post office address and citizenship are as stated below next to my name.

That I verily believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**ANTENNA CONTROL SYSTEM**

the specification of which (check one)

( ) is attached hereto.

(X) was filed on December 18, 2001 as

Application Serial No. 10/025,155

and was amended on \_\_\_\_\_

(if applicable)

That I have reviewed and understand the contents of the above-identified specification, including the claim, as amended by any amendment referred to above.

That I acknowledge the duty to disclose information known to be material to patentability of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

That I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate on this invention having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

264864  
(Number)

New Zealand  
(Country)

04/11/94  
(Day/Month/Year Filed)

Priority Claimed



Yes

No

272778  
(Number)

New Zealand  
(Country)

15/08/95  
(Day/Month/Year Filed)



Yes

No

PCT/NZ95/00106  
(Number)

PCT  
(Country)

16/10/95  
(Day/Month/Year Filed)



Yes

No

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

\_\_\_\_\_  
(Application Number)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Number)

\_\_\_\_\_  
(Filing Date)

That I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

United States Application(s)

09/713,614  
(Application Serial No.)

November 15, 2000  
(Filing Date)

Patented  
(Status)-(Patented, pending, abandoned)

08/817,445  
(Application Serial No.)

October 16, 1995 (PCT filed)  
April 30, 1997(371 Date)  
(Filing Date)

Patented  
(Status)-(Patented, pending, abandoned)

That all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

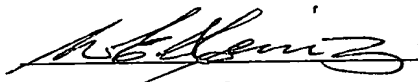
I hereby appoint the following attorneys, with full power of substitution and revocation, to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith and request that all correspondence and telephone calls in respect to this application be directed to WELSH & KATZ, LTD., 120 South Riverside Plaza, 22<sup>nd</sup> Floor, Chicago, Illinois 60606, Telephone No. (312) 655-1500:

| <u>Attorney</u>        | <u>Registration No.</u> |
|------------------------|-------------------------|
| A. Sidney Katz         | 24,003                  |
| Richard L. Wood        | 22,839                  |
| Jerold B. Schnayer     | 28,903                  |
| Eric C. Cohen          | 27,429                  |
| Joseph R. Marcus       | 25,060                  |
| Gerald S. Schur        | 22,053                  |
| Gerald T. Shekleton    | 27,466                  |
| James A. Scheer        | 29,434                  |
| Daniel R. Cherry       | 29,054                  |
| Edward P. Gamson       | 29,381                  |
| Kathleen A. Rheintgen  | 34,044                  |
| Thomas W. Tolpin       | 27,600                  |
| Jon P. Christensen     | 34,137                  |
| Eric D. Cohen          | 38,110                  |
| Walter J. Kawula, Jr.  | 39,724                  |
| Philip D. Segrest, Jr. | 39,021                  |
| Mitchell J. Weinstein  | 37,963                  |
| Leonard Friedman       | 37,135                  |
| Steven E. Feldman      | 40,604                  |
| Jeffrey W. Salmon      | 37,435                  |

Full name of sole or one  
joint inventor:

William Emil Heinz

Inventor's signature:

  
18-06-02.

Date:

Residence and Post Office Address:

74 Beazley Avenue

Wellington, New Zealand

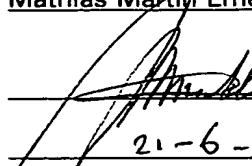
Citizenship:

New Zealand

Full name of additional  
joint inventor, if any:

Mathias Martin Ernest Ehlen

Inventor's signature:



Date:

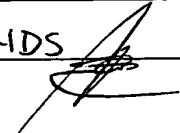
21-6-2002.

Residence and Post Office Address:

26 Forest Road, Pinehaven

Wellington, New Zealand

Citizenship:

~~New Zealand~~ NETHERLANDS 

Address for Correspondence:

Eric D. Cohen  
WELSH & KATZ, LTD.  
120 South Riverside Plaza  
22nd Floor  
Chicago, Illinois 60606